

LISTING OF PENDING CLAIMS

1. (Canceled)

2. (Previously presented) An oscillator device comprising:

an oscillation circuit substrate;

an oscillation circuit disposed on the oscillation circuit substrate to oscillate a signal having a predetermined oscillating frequency; and

a dielectric resonator for setting the oscillating frequency, the dielectric resonator including:

a dielectric substrate mounted on a surface of the oscillation circuit substrate;

a TM010 mode resonator having a first electrode disposed on a first surface of the dielectric substrate and a second electrode disposed on a second surface of the dielectric substrate, at least one of the first and second electrodes being circular; and

an excitation electrode disposed on the dielectric substrate, the excitation electrode being connected to the oscillation circuit and being coupled with the TM010 mode resonator,

wherein the oscillation circuit includes a transmission line disposed on the surface of the oscillation circuit substrate and a ground electrode, and

at least one of the first and second electrodes of the TM010 mode resonator is connected to a land disposed on the surface of the oscillation circuit substrate, and the land is connected to the ground electrode.

3. (Previously presented) The oscillator device according to claim 2, wherein the at least one of the first and second electrodes of the TM010 mode resonator is connected to the land with bumps.

4. (Previously presented) An oscillator device comprising:
an oscillation circuit substrate;
an oscillation circuit disposed on the oscillation circuit substrate to oscillate a signal having a predetermined oscillating frequency; and
a dielectric resonator for setting the oscillating frequency, the dielectric resonator including:

a dielectric substrate mounted on a surface of the oscillation circuit substrate;
a TM010 mode resonator having a first electrode disposed on a first surface of the dielectric substrate and a second electrode disposed on a second surface of the dielectric substrate, at least one of the first and second electrodes being circular; and
an excitation electrode disposed on the dielectric substrate, the excitation electrode being connected to the oscillation circuit and being coupled with the TM010 mode resonator,

wherein the oscillation circuit includes a transmission line and a ground electrode on the surface of the oscillation circuit substrate, and

at least one of the first and second electrodes of the TM010 mode resonator is connected to the ground electrode disposed on the surface of the oscillation circuit substrate.

5. (Previously presented) The oscillator device according to claim 2, further comprising:

a frequency control circuit for controlling the oscillating frequency, the frequency control circuit being disposed on the oscillation circuit substrate; and

a second excitation electrode disposed on the dielectric substrate, the second excitation electrode coupled with the TM010 mode resonator and connected to the frequency control circuit.

6. (Previously presented) A transmission and reception device using the oscillator device set forth in claim 2.

7. (Previously presented) The oscillator device according to claim 2, wherein the surface of the oscillation circuit substrate is a first surface, and the ground electrode is disposed on a second surface of the oscillation circuit substrate, the second surface opposing the first surface.

8. (Previously presented) The oscillator device according to claim 7, wherein the land is connected to the ground electrode via a through-hole passing through the oscillation circuit substrate.

9. (Previously presented) The oscillator device according to claim 4, further comprising:

a frequency control circuit for controlling the oscillating frequency, the frequency control circuit being disposed on the oscillation circuit substrate; and

a second excitation electrode disposed on the dielectric substrate, the second excitation electrode coupled with the TM010 mode resonator and connected to the frequency control circuit.

10. (Previously presented) A transmission and reception device using the oscillator device set forth in claim 4.